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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,660	02/14/2002	Euljoon Park	A02P1016US01	2963
7590	02/24/2004		EXAMINER	
PACESETTER, INC. 15900 Valley View Court Sylmar, CA 91392-9221			BRADFORD, RODERICK D	
			ART UNIT	PAPER NUMBER
			3762	2

DATE MAILED: 02/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/077,660	PARK ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Roderick Bradford	3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 18 December 2003.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 5-13 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4 and 14-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a)  The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1-37.      6) Other:

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments filed December 18, 2003 have been fully considered but they are not persuasive.

The rejection with respect to the Bonnet reference stands. Since the claims are a "comprising" claim an open-ended claim and even though Bonnet has an extra step of detecting sleep apnea he still meets the claim limitation by applying a rate to prevent and cure sleep apnea.

### ***Specification***

2. The disclosure is objected to because of the following informalities: The serial numbers are missing under related applications.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4, 14, 15, 16, 17, 18, 19 and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Bonnet et al. U.S. Patent No. 6,574,507.

Referring to claims 1, 14 and 18, Bonnet discloses an implantable cardiac

stimulation device for stimulating the heart comprising:

- a physiological sensor that is capable of sensing a physiological parameter and generating corresponding signals (column 4, lines 5-10)
- one or more pulse generators that are capable of generating cardiac pacing pulses (abstract)
- circuitry connected to the sensor that is operative to detect one of a resting and a sleep condition based (column 5, lines 1-7) on the signals and that is responsive to detection of one of a resting condition and a sleep condition to control the one or more pulse generators to pace the heart at a sleep apnea prevention rate (abstract).

Referring to claim 2, further comprising a controller coupled to the one or more pulse generators and to the physiological sensor, the controller comprising an executable control logic that distinguishes between a sleeping condition and a waking condition of a patient and controls the one or more pulse generators to pace at a sleep apnea prevention rate in response to detection of a sleeping condition (column 4, lines 5-10).

Referring to claims 4 and 17, a physiological sensor that measures physical motion for derivation of an activity parameter and an activity variance parameter, and activates sleep apnea preventive pacing when the activity and the activity variance signals indicate a sleeping condition (column 4, lines 54-67).

Referring to claims, 15 and 19, wherein the means for detecting a potential sleep apnea condition comprises means for detecting a sleep condition (column 4, lines 48-49).

Referring to claim 16, further comprising means for distinguishing between a sleeping condition and a waking a condition of a patient (column 5, lines 1-6).

Referring to claim 20, further comprising distinguishing between a sleeping condition and a waking condition (column 5 lines 1-6), timing generation of the cardiac pacing pulse and controlling the timed cardiac pacing pulses at a sleep apnea prevention rate (abstract).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 3 and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnet et al. U.S. Patent No. 6,574,507 in view of Bourgeois et al. U.S. Patent No. 6,126,611.

Referring to claims 3 and 21, Bonnet fails to further comprise one or more sensors capable of electric coupling to the cardiac tissue and including an executable control logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate, the executable control logic being capable of distinguishing between a sleeping condition and a waking condition and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition. However, Bourgeois discloses one or more sensors capable of electric coupling to the cardiac tissue (column 4, lines 1-9) and including an executable control logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate (column 5, lines 62-65), the executable control logic being capable of distinguishing between a sleeping condition and a waking condition (column 5, lines 65-67 and column 6, lines 1-4) and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition (column 6, lines 30-39) as a means to ensure proper detection of the state of the patient.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Bonnet to include one or more sensors capable of electric coupling to the cardiac tissue and including an executable control

logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate, the executable control logic being capable of distinguishing between a sleeping condition and a waking condition and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition, as taught by Bourgeois, as a means to ensure proper detection of the state of the patient.

***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (703) 305-3287. The examiner can normally be reached on Monday - Friday 7 a.m. - 4 p.m..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*R. Beauford*  
R.B.

*Angela D. Sykes*

ANGELA D. SYKES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700